

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A user authentication system comprising:
 - a communication terminal;
 - physical-port changeover means comprising:
 - packet signal input means for inputting a packet signal dispatched to a predetermined communication network from the communication terminal and requiring an authentication from the predetermined communication network, on an upstream side thereof,
 - authentication existence determination means for determining whether or not the input packet signal has received the authentication of said predetermined communication network,
 - an unauthenticated-signal port for outputting the input packet signal to a default network in response to a determination by the authentication existence determination means that the input packet signal does not have a required authentication,
 - an authenticated-signal port for outputting the input packet signal to an authentication network in response to a determination by the authentication existence determination means that the input packet signal has the required authentication;

temporary-use address offer means for giving a temporary-use IP address for login to the communication terminal in response to the outputting of the input packet signal to the default network by the unauthenticated signal port;

temporary-use IP address/communication terminal correspondence storage means for storing a correspondence between the temporary-use IP address and the communication terminal to which the temporary-use IP address was given;

login picture display means for inputting the packet signal dispatched by the communication terminal using the temporary-use IP address to login to the predetermined communication network, and for displaying a login picture;

authentication-propriety determination means for, at the time that the login was made from said communication terminal by using this login picture display means, determining whether or not the authentication is made for the communication terminal; and

network address bestowal means for giving to the communication terminal a network address for transferring the signal packet to a desired communication network in response to the authentication-propriety determination means determining that the authentication has been made, and changing the correspondence between the communication terminal stored in said temporary-use IP address/communication terminal correspondence storage means to the network address from the temporary-use IP address,

wherein said temporary-use address offer means and said authentication-propriety determination means are connected through an IP management network which facilitates authentication of the communication terminal to the predetermined network.

2. (previously presented): The user authentication system according to claim 1 further comprising network distribution means for receiving a packet signal through said authenticated-signal port and distributing the packet signal to the corresponding communication network, wherein said packet signal was dispatched from said communication terminal that was given the network address by said network address bestowal means.

3. (previously presented): The user authentication system according to claim 1, wherein said authentication existence determination means comprises a user registration section for storing information corresponding to registered users, who received the authentication, and means for determining whether or not the authentication for each user was made, based on whether or not the user was registered in this user registration section.

4. (currently amended): A user authentication system comprising:
a communication terminal;
physical-port changeover means comprising:
packet signal input means for inputting a packet signal dispatched to a predetermined communication network from the communication terminal and requiring an authentication from the predetermined communication network, on an upstream side thereof,
authentication existence determination means for determining whether or not the input packet signal has received the authentication of said predetermined communication network,

an unauthenticated-signal port for outputting the input packet signal to a default network in response to a determination by the authentication existence determination means that the input packet signal does not have a required authentication,

an authenticated-signal port for outputting the input packet signal to an authentication network in response to a determination by the authentication existence determination means that the input packet signal has the required authentication;

temporary-use address offer means for giving a temporary-use IP address for login to the communication terminal in response to the outputting of the input packet signal to the default network by the unauthenticated signal port;

temporary-use IP address/communication terminal correspondence storage means for storing a correspondence between the temporary-use IP address and the communication terminal to which the temporary-use IP address was given;

login picture display means for inputting the packet signal dispatched by the communication terminal using the temporary-use IP address to login to the predetermined communication network, and for displaying a login picture;

authentication-propriety determination means for, at the time that the login was made from said communication terminal by using this login picture display means, determining whether or not the authentication is made for the communication terminal; and

normal-IP-address bestowal means for giving to the communication terminal a normal IP address in response to the authentication-propriety determination means determining that the authentication has been made, and changing a correspondence between the communication

terminal stored in said temporary-use IP address/communication terminal correspondence
storage means to the normal IP address from the temporary-use IP address,

wherein said temporary-use address offer means and said authentication-propriety
determination means are connected through an IP management network which facilitates
authentication of the communication terminal to the predetermined network.

5. (previously presented): The user authentication system according to claim 4,
further comprising IP subnet distribution means for receiving a packet signal through the
authenticated-signal port dispatched from the communication terminal that was given the normal
IP address and distributing the packet signal to the corresponding communication network.

6. (previously presented): The user authentication system according to claim 4,
wherein said authentication existence determination means comprises a user registration section
for storing information corresponding to registered users, who received the authentication, and
means for determining whether or not the authentication for each user was made, based on
whether or not the user was registered in this user registration section.

7. (original): The user authentication system according to claim 5, said user
authentication system characterized in that said IP sub-network distribution means employs
either the IP address or an MAC address of said communication terminal to make distribution of
the packet signal sent from the communication terminal.

8. (original): The user authentication system according to claim 5, said user authentication system characterized in that said IP subnet distribution means distributes the packet signal to a communication network having a destination with which both of said IP address and an MAC address accorded.

9. (currently amended): A user authentication system comprising:
a communication terminal;
address bestowal means for, at the time that access was made from the communication terminal, giving to the communication terminal a temporary address that is accessible by an internet;

authentication-time Web access means for, at the time that said communication terminal made use of the temporary address given by the address bestowal means to request authentication, causing said communication terminal to make an input operation on a Web display picture, which is displayed at the time of internet access, taken as a picture for the authentication;

authentication means for authenticating the user terminal in response to the input operation; and

normal-IP-address bestowal means for giving to the communication terminal a normal IP address in response to the authentication means determining that the communication terminal is authenticated,

wherein said address bestowal means and said authentication means are connected through an IP management network which facilitates authentication of the communication terminal to the predetermined network.

10. (currently amended): A user authentication method comprising:
 - an internet access request step of dispatching a packet signal to a network service provider connected to a local area network to make a request for access to an internet;
 - temporary-use IP address return step of returning a temporary-use IP address to a communication terminal that dispatched the packet signal;
 - an authentication request step of using the temporary-use IP address to dispatch the packet signal of an authentication request for a specific internet service provider from said communication terminal;
 - an authentication-propriety determination step of, based on information described in the packet signal sent in this authentication request step, determining on a network service provider side whether or not authentication of said specific internet service provider is obtained;
 - a normal-IP-address return step of, at the time that it was determined in this authentication-propriety determination step that the authentication was obtained, returning to the communication terminal a normal IP address assigned for said specific internet service provider;
 - a packet-signal-for-internet-access dispatch step of using the normal IP address to dispatch the packet signal for internet access from said communication terminal; and

a packet signal distribution step of receiving the packet signal dispatched in the packet-signal-for-internet-access dispatch step and checking said normal IP address thereof, and distributing the packet signal to said specific internet service provider,

wherein said authentication request step dispatches the packet signal of the authentication request for the specific internet service provider to the requested internet network service provided through an IP management network.

11. (previously presented): The user authentication system of claim 1, wherein the temporary-use IP address is different from the network address.